

COMROE MEMORIAL SYMPOSIUM ON RESPIRATION
"RECEPTORS AND REFLEXES IN BREATHING"

Venue: University of Pennsylvania School of Medicine
Philadelphia, PA 19104

Annenberg Center Auditorium

Registration: March 16, 2:00 P.M. - March 28, 11:00 A.M., 1987

Session I - March 27, 1987, 8:45 A.M. - 10:45 A.M.

Peripheral Chemoreceptors: Physiology Chair, C. Eyzaguirre

1. Cellular and Microvascular Organization - D. McDonald
2. Neuroepithelial Bodies in Lungs - J.M. Lauweryns
3. Biophysical Aspects of Carotid Body - C. Eyzaguirre
4. Carotid Body vs. Aortic Body Chemosensors - R.S. Fitzgerald
5. Efferent Control of Chemoreceptor Function - R.G. O'Regan

TEA/COFFEE BREAK

Session II - March 27, 1987, 11:00 A.M. - 1:00 P.M.

Peripheral Chemoreceptors: Biochemistry Chair, R.E. Forster

1. Carotid Body Oxygen Profile and Chemoreception - H. Acker
2. Oxygen Modulation of Mitochondrial Energy Transduction
- B. Reynafarje
3. Oxidative Metabolism and Chemoreception - S. Lahiri
4. Carotid Body Chemistry and Function in the Newborn - E. Mulligan
5. Role of Calcium in Chemoreception - L.M. Leitner

LUNCH BREAK

Session III - March 27, 1987, 2:15 P.M. - 3:45 P.M.

Peripheral Chemoreceptors: Pharmacology Chair, E. Mills

1. APUD Cells and Peripheral Chemoreceptors - A.G.E. Pearce
2. Catecholamine Metabolism and Chemoreception - S.J. Fidone
3. Neuropeptides and Chemoreception - G. Hanson
4. Anesthesia, Metabolism and Receptors - P.J. Cohen

TEA/COFFEE BREAK

Session IV - March 27, 1987, 4:00 P.M. - 5:45 P.M.

Central Chemoreceptors Chair, T.F. Hornbein

1. Role of Medullary Intermediate Areas - D. Millhorn
2. Natural Stimulus - F.L. Eldridge
3. Control of Medullary pH during hypoxia - N.H. Edelman
4. Plausible Cellular Mechanisms - E. Nattie

Symposium Dinner at the University Museum
Tributes to Julius Comroe, Jr.
(Chinese Rotunda and Upper Egyptian Gallery)
7:00 P.M. - 10:00 P.M.

Session V - March 28, 1987, 8:45 A.M. - 10:45 A.M.

Neuro-Chemoreflexes Chair, R.S. Fitzgerald

1. Role of Carotid Body in Ventilatory Control During Chronic Hypoxia - G.E. Bisgard
2. Central Chemoreceptor Function in Hypoxia - J.E. Dempsey
3. Chemoreflexes in Breathing During Exercise - H.V. Forster
4. Neural Drive in Exercise Hyperpnea - K. Wasserman
5. J-Reflex - A.S. Paintal

TEA/COFFEE BREAK

Session VI - March 28, 1987, 11:00 A.M. - 1:00 P.M.

Airway Sensory Mechanisms Chair, H. Coleridge

1. Pulmonary Mechanoreceptors - A. Pack
2. Nonmyelinated Fibers - J. Coleridge
3. Physiology of Tracheal Ganglia - R.A. Mitchell/R.F. Coburn
4. Laryngeal Receptors and Reflexes - G. Sant'Ambrogio
5. Upper Airway Reflexes - J.G. Widdicombe

SYMPOSIUM PHOTOGRAPH AT THE ANNENBERG CENTER: 1:05 P.M.

Session VII - March 28, 1987, 2:15 P.M. - 3:45 P.M.

Central Mechanisms Chair, J. Feldman

1. Central Projections of Chemoreceptors - K.M. Spyer
2. Central Projections of Pulmonary Mechanoreceptors - R.O. Davies
3. Responses of Central Neurons - A.J. Berger
4. Sites of Pattern Generation - W. St. John

TEA/COFFEE BREAK

Session VIII - March 28, 1987, 4:15 P.M. - 6:00 P.M.

Respiration and Circulatory Integration Chair, A. Trzebski/F.L. Eldridge

1. Mechanisms of Pattern Generation - P. Getting
2. Respiratory and Sympathetic Interaction - G. Gebber
3. Rhythm Generation and Sensory Motor Integration - M. Cohen
4. Oscillations in Respiratory Control System - N.S. Cherniack

POSTER SESSIONS

Twelve voluntary papers (six per day) will be presented in posters in the hallway outside the auditorium during October 2nd and 3rd.

Cocktail and Dinner: 6:30 P.M. - 8:00 P.M.

Entertainment: 8:00 P.M. - 9:00 P.M.

Central Asian Odyssey: in Search of the Great Ice Mountain, T.F. Hornbein

Session IX - March 29, 1987, 8:45 A.M. - 10:45 A.M.

Sensation of Dyspnea

Chair, J.V. Weil

1. Respiratory Sensation in Lung Disease - M. Altose
2. Sense of Efforts and Respiratory Sensation - K.J. Killian
3. Diaphragm Afferents and Respiration - F. Zechman, C. Roussos
4. Muscle Proprioceptors: Kinesthetic Sensibility - I. McCloskey

Closing Session - 10:45 A.M. - 11:00 A.M.